Access DB# _____

# SEARCH REQUEST FORM

## Scientific and Technical Information Center

Requester's Full Name: _____ Examiner # : _____ Date: _____
Art Unit: _____ Phone Number 30_____ Serial Number: _____
Mail Box and Bldg/Room Location: _____ Results Format Preferred (circle): PAPER DISK E-MAIL

**If more than one search is submitted, please prioritize searches in order of need.**
**********

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

_____

Earliest Priority Filing Date: _____

***For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.**

Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 – 703-308-4498
jan.delaval@uspto.gov

**********

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Searcher: _____
Searcher Phone #: 4458
Searches Location: _____
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Date Completed: 3/13/05
Searcher Prep & Review Time: _____
Clerical Prep Time: 10
Online Time: 10

PTO-1590 (8-01)

**Type of Search**

NA Sequence (#) _____
AA Sequence (#) ✓
Structure (#) _____
Bibliographic _____
Litigation _____
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Patent Family _____
Other _____

**Vendors and cost where**

STN _____
Dialog _____
Questel/Orbit _____
Dr.Link _____
Lexis/Nexis ✓
Sequence Systems _____
WWW/Internet _____
Other (specify) _____

GenCore version 5.1.4_p5_4578


OM protein - protein search, using sw model

Run on: March 13, 2003, 18:04:22 ; Search time 12 Seconds
(without alignments)
453.239 Million cell updates/sec

Title: US-09-600-787-1
Perfect score: 610
Sequence: 1 DEQPNTISGSNNTVRSGSKN.....NTVSGSNHVVSGSNKVVTDA 118

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 199416 seqs, 46092074 residues

Total number of hits satisfying chosen parameters: 199416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_AA:*
1: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*
5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*
6: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
7: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep:*
8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
9: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*
10: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*
11: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:*
12: /cgn2_6/ptodata/1/pubpaa/US10_PUBCOMB.pep:*
13: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep:*
14: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | % Query Match | Length | DB | ID | Description |
|---|---|---|---|---|---|---|
| 1 | 172 | 28.2 | 892 | 9 | US-09-952-267-5 | Sequence 5, Appli |
| 2 | 171 | 28.0 | 624 | 9 | US-09-952-267-7 | Sequence 7, Appli |
| 3 | 169.5 | 27.8 | 941 | 9 | US-09-952-267-9 | Sequence 9, Appli |
| 4 | 166 | 27.2 | 889 | 9 | US-09-952-267-15 | Sequence 15, Appl |
| 5 | 150.5 | 24.7 | 873 | 9 | US-09-952-267-13 | Sequence 13, Appl |
| 6 | 137.5 | 22.5 | 831 | 9 | US-09-952-267-1 | Sequence 1, Appli |
| 7 | 122.5 | 20.1 | 2150 | 9 | US-10-135-322-17 | Sequence 17, Appl |
| 8 | 110.5 | 18.1 | 568 | 9 | US-10-086-510-5 | Sequence 5, Appli |
| 9 | 109.5 | 18.0 | 611 | 9 | US-10-086-510-4 | Sequence 4, Appli |
| 10 | 109 | 17.9 | 1599 | 9 | US-10-092-880-9 | Sequence 9, Appli |
| 11 | 109 | 17.9 | 1600 | 9 | US-10-092-880-10 | Sequence 10, Appl |
| 12 | 108.5 | 17.8 | 180 | 10 | US-09-864-761-37769 | Sequence 37769, A |
| 13 | 107 | 17.5 | 861 | 9 | US-09-820-843A-109 | Sequence 109, App |
| 14 | 106 | 17.4 | 623 | 9 | US-10-108-605-125 | Sequence 125, App |
| 15 | 106 | 17.4 | 623 | 9 | US-10-108-605-129 | Sequence 129, App |
| 16 | 106 | 17.4 | 871 | 10 | US-09-886-468-21 | Sequence 21, Appl |
| 17 | 105.5 | 17.3 | 676 | 10 | US-09-801-368-302 | Sequence 302, App |
| 18 | 104.5 | 17.1 | 2122 | 9 | US-09-813-214A-9 | Sequence 9, Appli |
| 19 | 103.5 | 17.0 | 666 | 10 | US-09-801-368-36 | Sequence 36, Appl |
| 20 | 103 | 16.9 | 117 | 10 | US-09-864-761-34734 | Sequence 34734, A |
| 21 | 103 | 16.9 | 1536 | 9 | US-10-092-880-2 | Sequence 2, Appli |
| 22 | 101 | 16.6 | 596 | 9 | US-10-063-547-100 | Sequence 100, App |
| 23 | 101 | 16.6 | 596 | 9 | US-10-174-590-310 | Sequence 310, App |
| 24 | 101 | 16.6 | 596 | 9 | US-10-176-758-310 | Sequence 310, App |
| 25 | 101 | 16.6 | 596 | 9 | US-10-063-616-100 | Sequence 100, App |
| 26 | 101 | 16.6 | 596 | 9 | US-10-175-737-310 | Sequence 310, App |
| 27 | 101 | 16.6 | 596 | 9 | US-10-063-502-100 | Sequence 100, App |
| 28 | 101 | 16.6 | 596 | 9 | US-10-173-706-310 | Sequence 310, App |
| 29 | 101 | 16.6 | 596 | 9 | US-10-175-738-310 | Sequence 310, App |
| 30 | 101 | 16.6 | 596 | 9 | US-10-175-752-310 | Sequence 310, App |
| 31 | 101 | 16.6 | 596 | 9 | US-10-176-482-310 | Sequence 310, App |
| 32 | 101 | 16.6 | 596 | 9 | US-10-176-757-310 | Sequence 310, App |
| 33 | 101 | 16.6 | 596 | 9 | US-10-176-913-310 | Sequence 310, App |
| 34 | 101 | 16.6 | 596 | 9 | US-10-180-552-310 | Sequence 310, App |
| 35 | 101 | 16.6 | 596 | 9 | US-10-180-557-310 | Sequence 310, App |
| 36 | 101 | 16.6 | 596 | 9 | US-10-173-700-310 | Sequence 310, App |
| 37 | 101 | 16.6 | 596 | 9 | US-10-174-572-310 | Sequence 310, App |
| 38 | 101 | 16.6 | 596 | 9 | US-10-174-579-310 | Sequence 310, App |
| 39 | 101 | 16.6 | 596 | 9 | US-10-174-582-310 | Sequence 310, App |
| 40 | 101 | 16.6 | 596 | 9 | US-10-174-588-310 | Sequence 310, App |
| 41 | 101 | 16.6 | 596 | 9 | US-10-175-739-310 | Sequence 310, App |
| 42 | 101 | 16.6 | 596 | 9 | US-10-175-740-310 | Sequence 310, App |
| 43 | 101 | 16.6 | 596 | 9 | US-10-175-743-310 | Sequence 310, App |
| 44 | 101 | 16.6 | 596 | 9 | US-10-176-488-310 | Sequence 310, App |
| 45 | 101 | 16.6 | 596 | 9 | US-10-176-492-310 | Sequence 310, App |

ALIGNMENTS

RESULT 1
US-09-952-267-5
; Sequence 5, Application US/09952267
; Publication No. US20030032772A1
; GENERAL INFORMATION:
; APPLICANT: HANSEN, ERIC J.
; APPLICANT: AEBI, CHRISTOPH
; APPLICANT: COPE, LESLIE D.
; APPLICANT: MACIVER, ISOBEL
; APPLICANT: FISKE, MICHAEL J.
; APPLICANT: FREDENBURG, ROSS A.
; TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS
; FILE REFERENCE: AMCY:024
; CURRENT APPLICATION NUMBER: US/09/952,267
; CURRENT FILING DATE: 2001-09-12
; PRIOR APPLICATION NUMBER: 09/336,447
; PRIOR FILING DATE: 1999-06-21
; NUMBER OF SEQ ID NOS: 98
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 5
; LENGTH: 892
; TYPE: PRT
; ORGANISM: Moraxella catarrhalis
US-09-952-267-5

Query Match 28.2%; Score 172; DB 9; Length 892;
Best Local Similarity 32.7%; Pred. No. 1.4e-08;
Matches 35; Conservative 19; Mismatches 47; Indels 6; Gaps 1;

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Qy       9 GSNNTVRSGSKNVLAGNDNTVISGDNNSVSGSNNTVVSGNDNTVTGSNHVVSGTNHIVTD 68
           | ::|:  |  |   |  :|| | ||  :|:|:||  |: |  ||:|  |:| :|
Db     143 GDSSTIGGGYYNQATGEKSTVAGGRNNQATGNNSTVAGGSYNQATGNNSTVAGGSH---- 198

Qy      69 NNNNVSGNDNNVSGSFHTVSGGHNTVSGSNNTVSGSNHVVSGSNKVV 115
             |  :|  :  :|  :  :  :    | |||: | | |  |||  :
Db     199 --NQATGEGSFAAGVENKANANNAVALGKNNTIDGDNSVAIGSNNTI 243
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RESULT 2
US-09-952-267-7
; Sequence 7, Application US/09952267
; Publication No. US20030032772A1

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; GENERAL INFORMATION:
;  APPLICANT: HANSEN, ERIC J.
;  APPLICANT:  AEBI, CHRISTOPH
;  APPLICANT:  COPE, LESLIE D.
;  APPLICANT:  MACIVER, ISOBEL
;  APPLICANT:  FISKE, MICHAEL J.
;  APPLICANT:  FREDENBURG, ROSS A.
;  TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS
;  FILE REFERENCE: AMCY:024
;  CURRENT APPLICATION NUMBER: US/09/952,267
;  CURRENT FILING DATE:  2001-09-12
;  PRIOR APPLICATION NUMBER: 09/336,447
;  PRIOR FILING DATE: 1999-06-21
;  NUMBER OF SEQ ID NOS: 98
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 7
;   LENGTH: 624
;   TYPE: PRT
;   ORGANISM: Moraxella catarrhalis
US-09-952-267-7

  Query Match             28.0%;  Score 171;  DB 9;  Length 624;
  Best Local Similarity   34.7%;  Pred. No. 1.1e-08;
  Matches   43;  Conservative   19;  Mismatches   50;  Indels   12;  Gaps    4;

Qy       5 NTISGSNNTVRSGSKNVLAGNDNTVISGDNNSVSGSNNTVVSGNDNTVTGSNHVVSGT-N 63
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Db     104 NQAKGEHSTIAGGESNQATGRNSTVAGGSNNQAVGTNSTVAGGSNNQAKGANSFAAGVGN 163

Qy      64 HIVTDN------NNNVSGNDNNVSGSFHTVSGGHNTV--SGSNNTVSGSNHVVSG---SN 112
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Db     164 QANTDNAVALGKNNTINGNNSAAIGSENTVNENQKNVFILGSNTTNAQSGSVLLGHETSG 223

Qy     113 KVVT 116
           |  |
Db     224 KEAT 227


RESULT 3
US-09-952-267-9
; Sequence 9, Application US/09952267
; Publication No. US20030032772A1
; GENERAL INFORMATION:
;  APPLICANT: HANSEN, ERIC J.
;  APPLICANT:  AEBI, CHRISTOPH
;  APPLICANT:  COPE, LESLIE D.
;  APPLICANT:  MACIVER, ISOBEL
;  APPLICANT:  FISKE, MICHAEL J.
;  APPLICANT:  FREDENBURG, ROSS A.
;  TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS
;  FILE REFERENCE: AMCY:024
;  CURRENT APPLICATION NUMBER: US/09/952,267
;  CURRENT FILING DATE:  2001-09-12
;  PRIOR APPLICATION NUMBER: 09/336,447
;  PRIOR FILING DATE: 1999-06-21
;  NUMBER OF SEQ ID NOS: 98
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 9
;   LENGTH: 941
;   TYPE: PRT
;   ORGANISM: Moraxella catarrhalis
US-09-952-267-9

  Query Match             27.8%;  Score 169.5;  DB 9;  Length 941;
  Best Local Similarity   35.8%;  Pred. No. 2.5e-08;
  Matches   43;  Conservative   18;  Mismatches   50;  Indels    9;  Gaps    4;

Qy       5 NTISGSNNTVRSGSKNVLAGNDNTVISGDNNSVSGSNNTVVSGNDNTVTGSNH-VVSGTN 63
           |   | |:||  |  |   |  :||  | ||   |: :||  || |   |:|  || |:|
Db     108 NEAIGKNSTVGGGFTNEAMGEYSTVAGGANNQAKGNYSTVGGGNGNKAIGNNSTVVGGSN 167

Qy      64 HIVTDNNNNVSGNDNNV---SGSF----HTVSGGHNTVS-GSNNTVSGSNHVVSGSNKVV 115
           :   . :: ::|  ||    :|||       :  :| |: |: ||: |:| |  |||  |
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Db     168 NQAKGEHSTIAGGKNNQATGNGSFAAGVENKADANNAVALGNKNTIEGTNSVAIGSNNTV 227


RESULT 4
US-09-952-267-15
; Sequence 15, Application US/09952267
; Publication No. US20030032772A1
; GENERAL INFORMATION:
;  APPLICANT: HANSEN, ERIC J.
;  APPLICANT:  AEBI, CHRISTOPH
;  APPLICANT:  COPE, LESLIE D.
;  APPLICANT:  MACIVER, ISOBEL
;  APPLICANT:  FISKE, MICHAEL J.
;  APPLICANT:  FREDENBURG, ROSS A.
;  TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS
;  FILE REFERENCE: AMCY:024
;  CURRENT APPLICATION NUMBER: US/09/952,267
;  CURRENT FILING DATE:  2001-09-12
;  PRIOR APPLICATION NUMBER: 09/336,447
;  PRIOR FILING DATE: 1999-06-21
;  NUMBER OF SEQ ID NOS: 98
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
;   LENGTH: 889
;   TYPE: PRT
;   ORGANISM: Moraxella catarrhalis
US-09-952-267-15

  Query Match             27.2%;  Score 166;  DB 9;  Length 889;
  Best Local Similarity   29.6%;  Pred. No. 5.1e-08;
  Matches   40;  Conservative   14;  Mismatches   57;  Indels   24;  Gaps    3;

Qy       5 NTISGSNNTVRSGSKNVLAGNDNTVISGDNNSVSGSNNTVVSGNDNTVTGSNHVVSG--T 62
           |   | :: :  |  |:  ||: |:  |  |  ||  :||  |  |   |    :||
Db     226 NLAEGKSSAIGGGEFNLALGNNATISGGRQNEASGDRSTVAGGEQNQAIGKYSTISGGRQ 285

Qy      63 NHIVTDNNNNVSGNDNNVSGSFHTVSGGH----------------------NTVS-GSNNT 100
           |    | :    |  |    | : |||||:                        | |: |: ||
Db     286 NEASGDRSTVAGGEQNQAIGKYSTVSGGYRNQATGKGSFAAGIDNKANADNAVALGNKNT 345

Qy     101 VSGSNHVVSGSNKVV 115
           : | | |  |||  |
Db     346 IEGENSVAIGSNNTV 360


RESULT 5
US-09-952-267-13
; Sequence 13, Application US/09952267
; Publication No. US20030032772A1
; GENERAL INFORMATION:
;  APPLICANT: HANSEN, ERIC J.
;  APPLICANT:  AEBI, CHRISTOPH
;  APPLICANT:  COPE, LESLIE D.
;  APPLICANT:  MACIVER, ISOBEL
;  APPLICANT:  FISKE, MICHAEL J.
;  APPLICANT:  FREDENBURG, ROSS A.
;  TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS
;  FILE REFERENCE: AMCY:024
;  CURRENT APPLICATION NUMBER: US/09/952,267
;  CURRENT FILING DATE:  2001-09-12
;  PRIOR APPLICATION NUMBER: 09/336,447
;  PRIOR FILING DATE: 1999-06-21
;  NUMBER OF SEQ ID NOS: 98
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 13
;   LENGTH: 873
;   TYPE: PRT
;   ORGANISM: Moraxella catarrhalis
US-09-952-267-13

  Query Match             24.7%;  Score 150.5;  DB 9;  Length 873;
  Best Local Similarity   26.7%;  Pred. No. 1.4e-06;
  Matches   40;  Conservative   24;  Mismatches   47;  Indels   39;  Gaps    5;
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Qy       5 NTISGSNNTVRSGSKNVLAGNDNTVISGDNNSVSGSNNTVVSGNDNTVTGSNHVVSG--T 62
Db     114 NEAKGESSTIGGGDNNSATGMYSTIGGGDNNSATGRYSTIAGGWLNQATGHSSTVAGGWL 173

Qy      63 NHIVTDNN-------NNVSGNDNNVSGSF--------HTVSGG---------------- 90
Db     174 NQATNENSTVGGGRFNQATGRNSTVAGGYKNKATGVDSTIAGGRNNQANGIGSFAAGIDN 233

Qy      91 ----HNTVS-GSNNTVSGSNHVVSGSNKVV 115
Db     234 QANANNTVALGNKNIIKGKDSVAIGSNNTV 263
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RESULT 6
US-09-952-267-1
; Sequence 1, Application US/09952267
; Publication No. US20030032772A1
; GENERAL INFORMATION:
; APPLICANT: HANSEN, ERIC J.
; APPLICANT: AEBI, CHRISTOPH
; APPLICANT: COPE, LESLIE D.
; APPLICANT: MACIVER, ISOBEL
; APPLICANT: FISKE, MICHAEL J.
; APPLICANT: FREDENBURG, ROSS A.
; TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS
; FILE REFERENCE: AMCY:024
; CURRENT APPLICATION NUMBER: US/09/952,267
; CURRENT FILING DATE: 2001-09-12
; PRIOR APPLICATION NUMBER: 09/336,447
; PRIOR FILING DATE: 1999-06-21
; NUMBER OF SEQ ID NOS: 98
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 831
; TYPE: PRT
; ORGANISM: Moraxella catarrhalis
US-09-952-267-1

Query Match 22.5%; Score 137.5; DB 9; Length 831;
Best Local Similarity 27.7%; Pred. No. 2.2e-05;
Matches 31; Conservative 21; Mismatches 59; Indels 1; Gaps 1;

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Qy       5 NTISGSNNTVRSGSKNVLAGNDNTVISGDNNSVSGSNNTVVSGNDNTVTGS-NHVVSGTN 63
Db     110 NKAEGRYSTIGGGSNNEATNEYSTIVGGDDNKATGRYSTIGGGDNNTREGEYSTVAGGKN 169

Qy      64 HIVTDNNNNVSGNDNNVSGSFHTVSGGHNTVSGSNNTVSGSNHVVSGSNKVV 115
Db     170 NQATGTGSFAAGVENQANAENAVAVGKKNIIEGENSVAIGSENTVKTEHKNV 221
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RESULT 7
US-10-135-322-17
; Sequence 17, Application US/10135322
; Patent No. US20020173017A1
; GENERAL INFORMATION:
; APPLICANT: BENFEY, PN
; APPLICANT: HELARIUTTA, Y
; APPLICANT: MAHONEN, AP
; APPLICANT: BONKE, AWM
; APPLICANT: KAUPPINEN, L
; APPLICANT: RIIKONEN, M
; TITLE OF INVENTION: WOODEN LEG GENE, PROMOTER AND USES THEREOF
; FILE REFERENCE: 5914-086-999
; CURRENT APPLICATION NUMBER: US/10/135,322
; CURRENT FILING DATE: 2002-04-30
; PRIOR APPLICATION NUMBER: 60/253,739
; PRIOR FILING DATE: 2000-11-29
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 17
; LENGTH: 2150
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
US-10-135-322-17

Query Match 20.1%; Score 122.5; DB 9; Length 2150;
Best Local Similarity 29.0%; Pred. No. 0.0017;
Matches 29; Conservative 24; Mismatches 46; Indels 1; Gaps 1;

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Qy       1 DEQPNTISGSNNTVRSGSKNVLAGNDNTVISGDNNSVSGSNNTVVSGNDNTVTGSNHVVS 60
Db     649 DDNDENDGNSNNTNSNNSNNNNNNNNNSSNNNNNNSNNNNNNNNNNNNNNNNNNNNN 708

Qy      61 GTNHIVTDNNNNVSGNDNNV-SGSFHTVSGGHNTVSGSNN 99
Db     709 NNNNNNNNNNNNNNNNNNYHNGATMMMSHNHQSIGMSSS 748
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RESULT 8
US-10-086-510-5
; Sequence 5, Application US/10086510
; Publication No. US20030027258A1
; GENERAL INFORMATION:
; APPLICANT: Fang-Tseh (Frank) CHANG et al.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR PEARL
; TITLE OF INVENTION: OYSTER CULTIVATION
; FILE REFERENCE: 505493000120
; CURRENT APPLICATION NUMBER: US/10/086,510
; CURRENT FILING DATE: 2002-02-27
; PRIOR APPLICATION NUMBER: 60/310,070
; PRIOR FILING DATE: 2001-08-02
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 568
; TYPE: PRT
; ORGANISM: Pinctada maxima
US-10-086-510-5

Query Match 18.1%; Score 110.5; DB 9; Length 568;
Best Local Similarity 28.3%; Pred. No. 0.0048;
Matches 32; Conservative 21; Mismatches 55; Indels 5; Gaps 2;

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Qy       1 DEQPNTISGSNNTVRSGSKNVLAGNDNTVISGDNNSVSGSNNTVVSGNDNTVTGSNHVVS 60
Db     243 DNGNNCDNGNNGNNDNNGNNGNNGNGNNGYNGNN----GDNGNNGNGNGNNGYNGNNGYN 298

Qy      61 GTNHIVTDNNNNVSGNDNNVSGSFHTVSGGH-NTVSGSNNTVSGSNHVVSGSN 112
Db     299 GNNGNNGNGNNDNNGNDNNGNNGGNGNNGNNGNGNNGNNGNGNNGNNGGNGNN 351
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RESULT 9
US-10-086-510-4
; Sequence 4, Application US/10086510
; Publication No. US20030027258A1
; GENERAL INFORMATION:
; APPLICANT: Fang-Tseh (Frank) CHANG et al.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR PEARL
; TITLE OF INVENTION: OYSTER CULTIVATION
; FILE REFERENCE: 505493000120
; CURRENT APPLICATION NUMBER: US/10/086,510
; CURRENT FILING DATE: 2002-02-27
; PRIOR APPLICATION NUMBER: 60/310,070
; PRIOR FILING DATE: 2001-08-02
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 611
; TYPE: PRT
; ORGANISM: Pinctada margaritifera
US-10-086-510-4

Query Match 18.0%; Score 109.5; DB 9; Length 611;

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  Best Local Similarity   30.3%;  Pred. No. 0.0065;
  Matches   33;  Conservative   21;  Mismatches   48;  Indels    7;  Gaps    3;

Qy       5 NTISGSNNTVRSGSKNVLAGNDNTVISGDNNSVSGSNNTVVSGNDNTVTGSNHVVSGTNH 64
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Db     295 NGYNGNNGYNGNNGDNGNSGNNGNGNNGYNGNNGGNGNNRNNGNGNNGYNGNNGDNGNNG 354

Qy      65 IVTDNNNNVSGNDNNVSGSFHTVSGGHNTVSGSN-NTVSGSNHVVSGSN 112
             : ||  :|||||  |:    : |:|  :|:| |  :|:|    |:|
Db     355 NNGNGNNGNNGNDNN--GNNGNGNNGNNGGNGNNGNNGNGNN----GNN 397


RESULT 10
US-10-092-880-9
; Sequence 9, Application US/10092880
; Patent No. US20020164354A1
; GENERAL INFORMATION:
;  APPLICANT: Barenkamp, Stephen J.
;  TITLE OF INVENTION: HIGH MOLECULAR WEIGHT SURFACE PROTEINS OF NON-TYPEABLE
;  TITLE OF INVENTION:  HAEMOPHILUS
;  FILE REFERENCE:
;  CURRENT APPLICATION NUMBER: US/10/092,880
;  CURRENT FILING DATE:  2002-03-08
;  PRIOR APPLICATION NUMBER: 09/155,614
;  PRIOR FILING DATE: 1998-09-30
;  PRIOR APPLICATION NUMBER: 08/617,697
;  PRIOR FILING DATE: 1996-04-01
;  PRIOR APPLICATION NUMBER: PCT/US97/04707
;  PRIOR FILING DATE: 1997-04-01
;  NUMBER OF SEQ ID NOS: 11
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 9
;   LENGTH: 1599
;   TYPE: PRT
;   ORGANISM: Haemophilus influenzae
US-10-092-880-9

  Query Match             17.9%;  Score 109;  DB 9;  Length 1599;
  Best Local Similarity   26.8%;  Pred. No. 0.023;
  Matches   30;  Conservative   24;  Mismatches   46;  Indels   12;  Gaps    5;

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Db    1141 AAGNVTTKEGT-TINATTGSVEVTAQNGTIKGNITSQNVTVTATENLVTTENAVINATSG 1199

Qy      65 IVTDNNNNVSGNDNNVSGSFHTVSGGHNTVSGSNNTVSGSNHVVSGSNKVVT 116
             |     |:|    :: |   : ||  | :: | ||:  ||  ::| :  ||
Db    1200 TV-----NISTKTGDIKGGIESTSGNVN-ITASGNTLKVSN--ITGQDVTVT 1243


RESULT 11
US-10-092-880-10
; Sequence 10, Application US/10092880
; Patent No. US20020164354A1
; GENERAL INFORMATION:
;  APPLICANT: Barenkamp, Stephen J.
;  TITLE OF INVENTION: HIGH MOLECULAR WEIGHT SURFACE PROTEINS OF NON-TYPEABLE
;  TITLE OF INVENTION:  HAEMOPHILUS
;  FILE REFERENCE:
;  CURRENT APPLICATION NUMBER: US/10/092,880
;  CURRENT FILING DATE:  2002-03-08
;  PRIOR APPLICATION NUMBER: 09/155,614
;  PRIOR FILING DATE: 1998-09-30
;  PRIOR APPLICATION NUMBER: 08/617,697
;  PRIOR FILING DATE: 1996-04-01
;  PRIOR APPLICATION NUMBER: PCT/US97/04707
;  PRIOR FILING DATE: 1997-04-01
;  NUMBER OF SEQ ID NOS: 11
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 10
;   LENGTH: 1600
;   TYPE: PRT
;   ORGANISM: Haemophilus influenzae
US-10-092-880-10

  Query Match             17.9%;  Score 109;  DB 9;  Length 1600;
  Best Local Similarity   26.8%;  Pred. No. 0.023;
  Matches   30;  Conservative   24;  Mismatches   46;  Indels   12;  Gaps    5;

Qy       8 SGSNNTVRSGSKNVLAGNDNTVISGDNNSVSG---SNNTVVSGNDNTVTGSNHVVSGTNH 64
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Db    1142 AAGNVTTKEGT-TINATTGSVEVTAQNGTIKGNITSQNVTVTATENLVTTENAVINATSG 1200

Qy      65 IVTDNNNNVSGNDNNVSGSFHTVSGGHNTVSGSNNTVSGSNHVVSGSNKVVT 116
             |     |:|    :: |   : ||  | :: | ||:  ||  ::| :  ||
Db    1201 TV-----NISTKTGDIKGGIESTSGNVN-ITASGNTLKVSN--ITGQDVTVT 1244


RESULT 12
US-09-864-761-37769
; Sequence 37769, Application US/09864761
; Patent No. US20020048763A1
; GENERAL INFORMATION:
;  APPLICANT: Penn, Sharron G.
;  APPLICANT:  Rank, David R.
;  APPLICANT:  Hanzel, David K.
;  APPLICANT:  Chen, Wensheng
;  TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
;  TITLE OF INVENTION:  GENE EXPRESSION ANALYSIS BY MICROARRAY
;  FILE REFERENCE: Aeomica-X-1
;  CURRENT APPLICATION NUMBER: US/09/864,761
;  CURRENT FILING DATE:  2001-05-23
;  PRIOR APPLICATION NUMBER: US 60/180,312
;  PRIOR FILING DATE: 2000-02-04
;  PRIOR APPLICATION NUMBER: US 60/207,456
;  PRIOR FILING DATE: 2000-05-26
;  PRIOR APPLICATION NUMBER: US 09/632,366
;  PRIOR FILING DATE: 2000-08-03
;  PRIOR APPLICATION NUMBER: GB 24263.6
;  PRIOR FILING DATE: 2000-10-04
;  PRIOR APPLICATION NUMBER: US 60/236,359
;  PRIOR FILING DATE: 2000-09-27
;  PRIOR APPLICATION NUMBER: PCT/US01/00666
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00667
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00664
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00669
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00665
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00668
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00663
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00662
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00661
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00670
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: US 60/234,687
;  PRIOR FILING DATE: 2000-09-21
;  PRIOR APPLICATION NUMBER: US 09/608,408
;  PRIOR FILING DATE: 2000-06-30
;  PRIOR APPLICATION NUMBER: US 09/774,203
;  PRIOR FILING DATE: 2001-01-29
;  NUMBER OF SEQ ID NOS: 49117
;  SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
; SEQ ID NO 37769
;   LENGTH: 180
;   TYPE: PRT
;   ORGANISM: Homo sapiens
;   FEATURE:
;   OTHER INFORMATION: MAP TO AL009178.4
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;   OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 1.5
;   OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 1.6
;   OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 1.6
;   OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 1.7
;   OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 1.7
;   OTHER INFORMATION: EXPRESSED IN BT474, SIGNAL = 1.5
;   OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 1.2
;   OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 1.8
;   OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 2.8
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US-09-864-761-37769

  Query Match             17.8%;  Score 108.5;  DB 10;  Length 180;
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  Matches   28;  Conservative   36;  Mismatches   46;  Indels    3;  Gaps    3;

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Db       6 SLSGTGRSL-SGAGRSLSGTGRS-LSGTGRSLSGTGRS-LSRTGRSCSGTGRCLSRTGRS 62

Qy      66 VTDNNNNVSGNDNNVSGSFHTVSGGHNTVSGSNNTVSGSNHVVSGSNKVVTDA 118
           ::    ::||   ::||:  ::||   ::||:   :||:   :||: : :: |
Db      63 LSRALRSLSGAGRSLSGTGRSLSGAGRSLSGTGRCLSGAGRSLSGTGRSLSGA 115


RESULT 13
US-09-820-843A-109
; Sequence 109, Application US/09820843A
; Publication No. US20030039963A1
; GENERAL INFORMATION:
;  APPLICANT: Council of Scientific and Industrial Research
;  TITLE OF INVENTION: A COMPUTATIONAL METHOD FOR THE IDENTIFICATION OF CANDIDATE PROTEI
;  TITLE OF INVENTION:  USEFUL AS ANTI-INFECTIVES
;  FILE REFERENCE: Q63915
;  CURRENT APPLICATION NUMBER: US/09/820,843A
;  CURRENT FILING DATE:  2001-03-30
;  NUMBER OF SEQ ID NOS: 118
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 109
;   LENGTH: 861
;   TYPE: PRT
;   ORGANISM: Plasmodium falciparum
;   FEATURE:
;   NAME/KEY: misc_feature
;   OTHER INFORMATION: hypothetical protein
;   NAME/KEY: misc_feature
;   OTHER INFORMATION: gi|4493994
US-09-820-843A-109

  Query Match             17.5%;  Score 107;  DB 9;  Length 861;
  Best Local Similarity   26.7%;  Pred. No. 0.017;
  Matches   28;  Conservative   22;  Mismatches   33;  Indels   22;  Gaps    5;

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Db      38 GGNKYIPRDRSN----NNNNI----GNNVNGMNNFVLLNNNN----NNMRIRNT---YNN 82

Qy      69 NNNNVSGNDNNVSGSFHTVSGGHNTVS-------GSNNTVSGSNH 106
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Db      83 NNNNINNNNNNNNNNFNNFNNNNNNNNFNNFNNFNNNNNFNNNNH 127


RESULT 14
US-10-108-605-125
; Sequence 125, Application US/10108605
; Patent No. US20020160934A1
; GENERAL INFORMATION:
;  APPLICANT: Broadus, Julie
;  APPLICANT:  Stam, Lynn
;  APPLICANT:  Bachmann, Jane
;  APPLICANT:  Kamdar, Kim
;  TITLE OF INVENTION: NUCLEIC ACID SEQUENCES FROM DROSOPHILA MELANOGASTER THAT ENCODE
;  TITLE OF INVENTION:  PROTEINS ESSENTIAL FOR LARVAL VIABILITY AND USES THEREOF
;  FILE REFERENCE: 31133B
;  CURRENT APPLICATION NUMBER: US/10/108,605
;  CURRENT FILING DATE:  2002-03-27
;  PRIOR APPLICATION NUMBER: US 09/761,142
;  PRIOR FILING DATE: 2001-01-16
;  PRIOR APPLICATION NUMBER: US 60/176,418
;  PRIOR FILING DATE: 2000-01-14
;  NUMBER OF SEQ ID NOS: 361
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 125
;   LENGTH: 623
;   TYPE: PRT
;   ORGANISM: Drosophila melanogaster
US-10-108-605-125

  Query Match             17.4%;  Score 106;  DB 9;  Length 623;
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  Matches   36;  Conservative   20;  Mismatches   25;  Indels   40;  Gaps    7;

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Db     251 QQP-TVNGSG----SASSN----NNNSMLPPAVQQSNNENNNTSSSNTNNSSNNNNNSGG 301

Qy      55 SNHVVSGTNHIVTDNNNNVSGNDNNVS---------------GSFHTVSGGHNTVSGSN 98
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Db     302 SNNSNAGSN-----NNNN---NNNNINFMAAAAIFQHHLKEEPGTQNGNIGGYGGGSNSQ 353

Qy      99 N 99
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Db     354 N 354


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US-10-108-605-129
; Sequence 129, Application US/10108605
; Patent No. US20020160934A1
; GENERAL INFORMATION:
;  APPLICANT: Broadus, Julie
;  APPLICANT:  Stam, Lynn
;  APPLICANT:  Bachmann, Jane
;  APPLICANT:  Kamdar, Kim
;  TITLE OF INVENTION: NUCLEIC ACID SEQUENCES FROM DROSOPHILA MELANOGASTER THAT ENCOD
;  TITLE OF INVENTION:  PROTEINS ESSENTIAL FOR LARVAL VIABILITY AND USES THEREOF
;  FILE REFERENCE: 31133B
;  CURRENT APPLICATION NUMBER: US/10/108,605
;  CURRENT FILING DATE:  2002-03-27
;  PRIOR APPLICATION NUMBER: US 09/761,142
;  PRIOR FILING DATE: 2001-01-16
;  PRIOR APPLICATION NUMBER: US 60/176,418
;  PRIOR FILING DATE: 2000-01-14
;  NUMBER OF SEQ ID NOS: 361
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 129
;   LENGTH: 623
;   TYPE: PRT
;   ORGANISM: Drosophila melanogaster
US-10-108-605-129

  Query Match             17.4%;  Score 106;  DB 9;  Length 623;
  Best Local Similarity   29.8%;  Pred. No. 0.014;
  Matches   36;  Conservative   20;  Mismatches   25;  Indels   40;  Gaps    7;

Qy       2 EQPNTISGSNNTVRSGSKNVLAGNDNTVI-------SGDNNSVSGSNNTVVSGNDNTVTG 54
           :|| |::||     | | |    |:|:::       : :||: | ||    | |:|   |
Db     251 QQP-TVNGSG----SASSN----NNNSMLPPAVQQSNNENNNTSSSNTNNSSNNNNNSGG 301

Qy      55 SNHVVSGTNHIVTDNNNNVSGNDNNVS---------------GSFHTVSGGHNTVSGSN 98
           ||:  :|:|     ||||   |:||::                |: :   ||:   | |
Db     302 SNNSNAGSN-----NNNN---NNNNINFMAAAAIFQHHLKEEPGTQNGNIGGYGGGSNSQ 353

Qy.     99 N 99
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Db     354 N 354
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Job time : 14 secs

OM protein - protein search, using sw model

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Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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| 2 | 171 | 28.0 | 624 | 4 | US-09-336-447A-7 | Sequence 7, Appli |
| 3 | 169.5 | 27.8 | 941 | 4 | US-09-336-447A-9 | Sequence 9, Appli |
| 4 | 166 | 27.2 | 889 | 4 | US-09-336-447A-15 | Sequence 15, Appl |
| 5 | 150.5 | 24.7 | 873 | 4 | US-09-336-447A-13 | Sequence 13, Appl |
| 6 | 137.5 | 22.5 | 831 | 4 | US-09-336-447A-1 | Sequence 1, Appli |
| 7 | 135 | 22.1 | 1584 | 4 | US-09-457-040B-27 | Sequence 27, Appl |
| 8 | 123 | 20.2 | 110 | 2 | US-08-569-166-34 | Sequence 34, Appl |
| 9 | 116.5 | 19.1 | 666 | 2 | US-08-737-716-14 | Sequence 14, Appl |
| 10 | 110 | 18.0 | 915 | 4 | US-09-206-942-35 | Sequence 35, Appl |
| 11 | 110 | 18.0 | 1222 | 4 | US-09-206-942-37 | Sequence 37, Appl |
| 12 | 110 | 18.0 | 1228 | 4 | US-09-206-942-34 | Sequence 34, Appl |
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| 14 | 109 | 17.9 | 1338 | 4 | US-08-719-641-9 | Sequence 9, Appli |
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| 16 | 109 | 17.9 | 1529 | 4 | US-08-719-641-10 | Sequence 10, Appl |
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| 18 | 109 | 17.9 | 1600 | 2 | US-08-617-697-10 | Sequence 10, Appl |
| 19 | 107 | 17.5 | 1220 | 4 | US-09-206-942-28 | Sequence 28, Appl |
| 20 | 107 | 17.5 | 1226 | 4 | US-09-206-942-26 | Sequence 26, Appl |
| 21 | 105.5 | 17.3 | 992 | 4 | US-09-206-942-61 | Sequence 61, Appl |
| 22 | 105.5 | 17.3 | 998 | 4 | US-09-206-942-59 | Sequence 59, Appl |
| 23 | 105 | 17.2 | 969 | 4 | US-09-206-942-32 | Sequence 32, Appl |
| 24 | 105 | 17.2 | 975 | 4 | US-09-206-942-30 | Sequence 30, Appl |
| 25 | 104.5 | 17.1 | 1833 | 4 | US-08-621-944A-4 | Sequence 4, Appli |
| 26 | 104.5 | 17.1 | 1833 | 4 | US-08-945-567D-4 | Sequence 4, Appli |
| 27 | 104.5 | 17.1 | 1992 | 4 | US-08-621-944A-3 | Sequence 3, Appli |
| 28 | 104.5 | 17.1 | 1992 | 4 | US-08-945-567D-3 | Sequence 3, Appli |
| 29 | 104.5 | 17.1 | 2123 | 4 | US-08-968-685A-10 | Sequence 10, Appl |
| 30 | 103.5 | 17.0 | 1073 | 4 | US-09-206-942-49 | Sequence 49, Appl |
| 31 | 103.5 | 17.0 | 1079 | 4 | US-09-206-942-47 | Sequence 47, Appl |
| 32 | 103.5 | 17.0 | 2314 | 4 | US-09-268-347-49 | Sequence 49, Appl |
| 33 | 103 | 16.9 | 1095 | 4 | US-09-206-942-69 | Sequence 69, Appl |
| 34 | 103 | 16.9 | 1536 | 1 | US-08-038-682-2 | Sequence 2, Appli |
| 35 | 103 | 16.9 | 1536 | 1 | US-08-302-832-2 | Sequence 2, Appli |
| 36 | 103 | 16.9 | 1536 | 2 | US-08-530-198-2 | Sequence 2, Appli |
| 37 | 103 | 16.9 | 1536 | 2 | US-08-469-880-2 | Sequence 2, Appli |
| 38 | 103 | 16.9 | 1536 | 2 | US-08-728-470-2 | Sequence 2, Appli |
| 39 | 103 | 16.9 | 1536 | 2 | US-08-617-697-2 | Sequence 2, Appli |
| 40 | 103 | 16.9 | 1536 | 4 | US-08-719-641-2 | Sequence 2, Appli |
| 41 | 103 | 16.9 | 1536 | 4 | US-09-206-942-67 | Sequence 67, Appl |
| 42 | 102.5 | 16.8 | 2048 | 4 | US-09-268-347-48 | Sequence 48, Appl |
| 43 | 101.5 | 16.6 | 246 | 4 | US-09-451-117-2 | Sequence 2, Appli |
| 44 | 100.5 | 16.5 | 631 | 4 | US-09-620-412C-325 | Sequence 325, App |
| 45 | 99.5 | 16.3 | 1612 | 1 | US-08-169-927-2 | Sequence 2, Appli |

ALIGNMENTS

RESULT 1
US-09-336-447A-5
; Sequence 5, Application US/09336447A
; Patent No. 6310190
; GENERAL INFORMATION:
; APPLICANT: HANSEN, ERIC J.
; APPLICANT: AEBI, CHRISTOPH
; APPLICANT: COPE, LESLIE D.
; APPLICANT: MACIVER, ISOBEL
; APPLICANT: FISKE, MICHAEL J.
; APPLICANT: FREDENBURG, ROSS A.
; TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS
; FILE REFERENCE: AMCY:024
; CURRENT APPLICATION NUMBER: US/09/336,447A
; CURRENT FILING DATE: 1999-06-21
; NUMBER OF SEQ ID NOS: 98
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 5
; LENGTH: 892
; TYPE: PRT
; ORGANISM: Moraxella catarrhalis
US-09-336-447A-5

Query Match 28.2%; Score 172; DB 4; Length 892;
Best Local Similarity 32.7%; Pred. No. 1.8e-08;
Matches 35; Conservative 19; Mismatches 47; Indels 6; Gaps 1;

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Db     143 GDSSTIGGGYYNQATGEKSTVAGGRNNQATGNNSTVAGGSYNQATGNNSTVAGGSH---- 198

Qy      69 NNNNVSGNDNNVSGSFHTVSGGHNTVSGSNNTVSGSNHVVSGSNKVV 115
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RESULT 2
US-09-336-447A-7
; Sequence 7, Application US/09336447A
; Patent No. 6310190
; GENERAL INFORMATION:
; APPLICANT: HANSEN, ERIC J.
; APPLICANT: AEBI, CHRISTOPH
; APPLICANT: COPE, LESLIE D.
; APPLICANT: MACIVER, ISOBEL
; APPLICANT: FISKE, MICHAEL J.
; APPLICANT: FREDENBURG, ROSS A.
; TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS
; FILE REFERENCE: AMCY:024
; CURRENT APPLICATION NUMBER: US/09/336,447A

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;  CURRENT FILING DATE:  1999-06-21
;  NUMBER OF SEQ ID NOS: 98
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 7
;    LENGTH: 624
;    TYPE: PRT
;    ORGANISM: Moraxella catarrhalis
US-09-336-447A-7`

  Query Match             28.0%;  Score 171;  DB 4;  Length 624;
  Best Local Similarity   34.7%;  Pred. No. 1.4e-08;
  Matches   43;  Conservative   19;  Mismatches   50;  Indels   12;  Gaps    4;

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Qy      64 HIVTDN------NNNVSGNDNNVSGSFHTVSGGHNTV--SGSNNTVSGSNHVVSG---SN 112
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Db     164 QANTDNAVALGKNNTINGNNSAAIGSENTVNENQKNVFILGSNTTNAQSGSVLLGHETSG 223

Qy     113 KVVT 116
           | |
Db     224 KEAT 227


RESULT 3
US-09-336-447A-9
; Sequence 9, Application US/09336447A
; Patent No. 6310190
; GENERAL INFORMATION:
;  APPLICANT: HANSEN, ERIC J.
;  APPLICANT:  AEBI, CHRISTOPH
;  APPLICANT:  COPE, LESLIE D.
;  APPLICANT:  MACIVER, ISOBEL
;  APPLICANT:  FISKE, MICHAEL J.
;  APPLICANT:  FREDENBURG, ROSS A.
;  TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS
;  FILE REFERENCE: AMCY:024
;  CURRENT APPLICATION NUMBER: US/09/336,447A
;  CURRENT FILING DATE:  1999-06-21
;  NUMBER OF SEQ ID NOS: 98
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 9
;    LENGTH: 941
;    TYPE: PRT
;    ORGANISM: Moraxella catarrhalis
US-09-336-447A-9

  Query Match             27.8%;  Score 169.5;  DB 4;  Length 941;
  Best Local Similarity   35.8%;  Pred. No. 3.2e-08;
  Matches   43;  Conservative   18;  Mismatches   50;  Indels    9;  Gaps    4;

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Db     108 NEAIGKNSTVGGGFTNEAMGEYSTVAGGANNQAKGNYSTVGGGNGNKAIGNNSTVVGGSN 167

Qy      64 HIVTDNNNNVSGNDNNV---SGSF----HTVSGGHNTVS-GSNNTVSGSNHVVSGSNKVV 115
           :     :: ::|  ||    :|||       :  :| |: |: ||: |:| |  |||  |
Db     168 NQAKGEHSTIAGGKNNQATGNGSFAAGVENKADANNAVALGNKNTIEGTNSVAIGSNNTV 227


RESULT 4
US-09-336-447A-15
; Sequence 15, Application US/09336447A
; Patent No. 6310190
; GENERAL INFORMATION:
;  APPLICANT: HANSEN, ERIC J.
;  APPLICANT:  AEBI, CHRISTOPH
;  APPLICANT:  COPE, LESLIE D.
;  APPLICANT:  MACIVER, ISOBEL
;  APPLICANT:  FISKE, MICHAEL J.
;  APPLICANT:  FREDENBURG, ROSS A.
;  TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS
;  FILE REFERENCE: AMCY:024
;  CURRENT APPLICATION NUMBER: US/09/336,447A
;  CURRENT FILING DATE:  1999-06-21
;  NUMBER OF SEQ ID NOS: 98
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
;    LENGTH: 889
;    TYPE: PRT
;    ORGANISM: Moraxella catarrhalis
US-09-336-447A-15

  Query Match             27.2%;  Score 166;  DB 4;  Length 889;
  Best Local Similarity   29.6%;  Pred. No. 6.5e-08;
  Matches   40;  Conservative   14;  Mismatches   57;  Indels   24;  Gaps    3;

Qy       5 NTISGSNNTVRSGSKNVLAGNDNTVISGDNNSVSGSNNTVVSGNDNTVTGSNHVVSG--T 62
           |   | :: :  |  |:  ||: |:  |  |  ||  :||  |  |   |    :||
Db     226 NLAEGKSSAIGGGEFNLALGNNATISGGRQNEASGDRSTVAGGEQNQAIGKYSTISGGRQ 285

Qy      63 NHIVTDNNNNVSGNDNNVSGSFHTVSGGH----------------------NTVS-GSNNT 100
           |    | :    |  |   | : |||||:                        | |: |: ||
Db     286 NEASGDRSTVAGGEQNQAIGKYSTVSGGYRNQATGKGSFAAGIDNKANADNAVALGNKNT 345

Qy     101 VSGSNHVVSGSNKVV 115
           : | | |  |||  |
Db     346 IEGENSVAIGSNNTV 360


RESULT 5
US-09-336-447A-13
; Sequence 13, Application US/09336447A
; Patent No. 6310190
; GENERAL INFORMATION:
;  APPLICANT: HANSEN, ERIC J.
;  APPLICANT:  AEBI, CHRISTOPH
;  APPLICANT:  COPE, LESLIE D.
;  APPLICANT:  MACIVER, ISOBEL
;  APPLICANT:  FISKE, MICHAEL J.
;  APPLICANT:  FREDENBURG, ROSS A.
;  TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS
;  FILE REFERENCE: AMCY:024
;  CURRENT APPLICATION NUMBER: US/09/336,447A
;  CURRENT FILING DATE:  1999-06-21
;  NUMBER OF SEQ ID NOS: 98
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 13
;    LENGTH: 873
;    TYPE: PRT
;    ORGANISM: Moraxella catarrhalis
US-09-336-447A-13

  Query Match             24.7%;  Score 150.5;  DB 4;  Length 873;
  Best Local Similarity   26.7%;  Pred. No. 1.8e-06;
  Matches   40;  Conservative   24;  Mismatches   47;  Indels   39;  Gaps    5;

Qy       5 NTISGSNNTVRSGSKNVLAGNDNTVISGDNNSVSGSNNTVVSGNDNTVTGSNHVVSG--T 62
           |   | ::|:  |  |   |  :|:  |||||  :|  :|:  |  |  || :  |:|
Db     114 NEAKGESSTIGGGDNNSATGMYSTIGGGDNNSATGRYSTIAGGWLNQATGHSSTVAGGWL 173

Qy      63 NHIVTDNN-------NNVSGNDNNVSGSF--------HTVSGG----------------- 90
           |    :|:       |  :| :: |:| :         |::||
Db     174 NQATNENSTVGGGRFNQATGRNSTVAGGYKNKATGVDSTIAGGRNNQANGIGSFAAGIDN 233

Qy      91 ----HNTVS-GSNNTVSGSNHVVSGSNKVV 115
                :|||: |: | : | : |  |||  |
Db     234 QANANNTVALGNKNIIKGKDSVAIGSNNTV 263


RESULT 6
US-09-336-447A-1
; Sequence 1, Application US/09336447A
; Patent No. 6310190
```

```
; GENERAL INFORMATION:
;  APPLICANT: HANSEN, ERIC J.
;  APPLICANT:  AEBI, CHRISTOPH
;  APPLICANT:  COPE, LESLIE D.
;  APPLICANT:  MACIVER, ISOBEL
;  APPLICANT:  FISKE, MICHAEL J.
;  APPLICANT:  FREDENBURG, ROSS A.
;  TITLE OF INVENTION: USPA1 AND USPA2 ANTIGENS OF MORAXELLA CATARRHALIS
;  FILE REFERENCE: AMCY:024
;  CURRENT APPLICATION NUMBER: US/09/336,447A
;  CURRENT FILING DATE:  1999-06-21
;  NUMBER OF SEQ ID NOS: 98
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
;   LENGTH: 831
;   TYPE: PRT
;   ORGANISM: Moraxella catarrhalis
US-09-336-447A-1

  Query Match             22.5%;  Score 137.5;  DB 4;  Length 831;
  Best Local Similarity   27.7%;  Pred. No. 2.9e-05;
  Matches   31;  Conservative   21;  Mismatches   59;  Indels    1;  Gaps    1;

Qy       5 NTISGSNNTVRSGSKNVLAGNDNTVISGDNNSVSGSNNTVVSGNDNTVTGS-NHVVSGTN 63
           |   |  :|:  || |       :|:: ||:|  :|  :|:  |::||  |  : |  | |
Db     110 NKAEGRYSTIGGGSNNEATNEYSTIVGGDDNKATGRYSTIGGGDNNTREGEYSTVAGGKN 169

Qy      64 HIVTDNNNNVSGNDNNVSGSFHTVSGGHNTVSGSNNTVSGSNHVVSGSNKVV 115
           :  |   :  :| :|  :        |  | : | |:   || : |   :| |
Db     170 NQATGTGSFAAGVENQANAENAVAVGKKNIIEGENSVAIGSENTVKTEHKNV 221


RESULT 7
US-09-457-040B-27
; Sequence 27, Application US/09457040B
; Patent No. 6387641
; GENERAL INFORMATION:
;  APPLICANT: Vertex Pharmaceuticals Incorporated
;  APPLICANT:  Bellon, Steve
;  TITLE OF INVENTION: Crystallized P38 Complexes
;  FILE REFERENCE: VPI/98-14
;  CURRENT APPLICATION NUMBER: US/09/457,040B
;  CURRENT FILING DATE:  1999-12-08
;  NUMBER OF SEQ ID NOS: 41
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 27
;   LENGTH: 1584
;   TYPE: PRT
;   ORGANISM: DICDI - Dictyostelium Discoideum
US-09-457-040B-27

  Query Match             22.1%;  Score 135;  DB 4;  Length 1584;
  Best Local Similarity   35.5%;  Pred. No. 0.00011;
  Matches   39;  Conservative   18;  Mismatches   33;  Indels   20;  Gaps    5;

Qy       5 NTISGSNNTVRSGSKNVLAGNDNTVISGDNNSVSGSNNTVVSGNDNTVTGSNHVVSGTNH 64
           |  : :||   | | |    |:| : :  ||: | |||   : |:|: : ||   |  |:
Db     468 NNNNNNNNNNSNSSNT---NNNNINNTTNNNNSNSNNN--NNNNNSNSNSN---SNNNN 519

Qy      65 IVTDNNNNVSGNDNNV----------SGSFHTVSGGHNTVSGSNNTVSGS 104
           |  :|||| : |:||:          :    | | | |  ||:||: |||
Db     520 I--NNNNNNNNNNNNIYLTKKPSIGSTDESSTGSLGGNNSSGNNNSSSGS 567


RESULT 8
US-08-569-166-34
; Sequence 34, Application US/08569166
; Patent No. 5830722
;  GENERAL INFORMATION:
;    APPLICANT:  NICOLAS, LUC
;    APPLICANT:  CHARLES, JEAN-FRANCOIS
;    APPLICANT:  DELECLUSE, ARMELLE
;    APPLICANT:  BARLOY, FREDERIQUE
;    TITLE OF INVENTION:  CLOSTRIDIUM BIFERMENTANS DNA FRAGMENT
;    TITLE OF INVENTION:  BEARING GENES CODING FOR PROTEINS LINKED TO AN
;    TITLE OF INVENTION:  INSECTICIDAL ACTIVITY
;    NUMBER OF SEQUENCES:  35
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT,
;      ADDRESSEE:  P.C.
;      STREET:  1755 S. JEFFERSON DAVIS HIGHWAY, SUITE 400
;      CITY:  ARLINGTON
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22202
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/569,166
;      FILING DATE:  05-JUL-1996
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/FR94/00768
;      FILING DATE:  24-JUN-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  FR 93/07795
;      FILING DATE:  25-JUN-1993
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  OBLON, NORMAN F.
;      REGISTRATION NUMBER:  24,618
;      REFERENCE/DOCKET NUMBER:  660-106-0 PCT
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-413-3000
;      TELEFAX:  703-413-2220
;  INFORMATION FOR SEQ ID NO:  34:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  110 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-569-166-34

  Query Match             20.2%;  Score 123;  DB 2;  Length 110;
  Best Local Similarity   30.9%;  Pred. No. 5.6e-05;
  Matches   34;  Conservative   23;  Mismatches   43;  Indels   10;  Gaps    3;

Qy       5 NTISGSNNTVRSGSKNVLAGNDNTVISGDNNSVSGSNNTV---VSGNDNTVTGSNHVVSG 61
           || : :|||       |    |:|  |: :||: : :||       : |:|    ||:  :
Db       2 NTNNNNNNT------NNNTNNNNNNINNNNNNTNNNNNNANNQNTNNNNMGNNSNNNNNP 55

Qy      62 TNHIVTDNNNNVSGNDNNVSGSFHTVSGGHNTVSGSNNTVS-GSNHVVSG 110
            |:   :|||| : |::| : :  |  ||:|  :  ||  : |:   |||
Db      56 NNNNHQNNNNNNTSNNSNTTTATTTAPGGNNLTNSLNNAGNLGNLGRVSG 105


RESULT 9
US-08-737-716-14
; Sequence 14, Application US/08737716
; Patent No. 5955258
;  GENERAL INFORMATION:
;    APPLICANT:  Girbe BUIST
;    APPLICANT:  Gerard VENEMA
;    APPLICANT:  Jan KOK
;    APPLICANT:  Adrianus Marinus LEDEBOER
;    TITLE OF INVENTION:  Process for the lysis of a culture of lactic
;    TITLE OF INVENTION:  acid bacteria by means of a lysin, and uses of the resultin
;    TITLE OF INVENTION:  lysed culture.
;    NUMBER OF SEQUENCES:  16
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Pillsbury Madison & Sutro, L.L.P.
;      STREET:  1100 New York Avenue, N.W.
;      CITY:  Washington
```

;  STATE: D.C.
;  COUNTRY: U.S.A.
;  ZIP: 20005-3918
;  COMPUTER READABLE FORM:
;  MEDIUM TYPE: Floppy disk
;  COMPUTER: IBM PC compatible
;  OPERATING SYSTEM: PC-DOS/MS-DOS
;  SOFTWARE: Microsoft Word
;  CURRENT APPLICATION DATA:
;  APPLICATION NUMBER: US/08/737,716
;  FILING DATE: 22-APR-1997
;  CLASSIFICATION: 435
;  PRIOR APPLICATION DATA:
;  APPLICATION NUMBER: PCT/NL95/00170
;  FILING DATE: 12-MAY-1995
;  PRIOR APPLICATION DATA:
;  APPLICATION NUMBER: EP 94201353.3
;  FILING DATE: 12-MAY-1994
;  INFORMATION FOR SEQ ID NO: 14:
;  SEQUENCE CHARACTERISTICS:
;  LENGTH: 666 amino acids
;  TYPE: amino acid
;  TOPOLOGY: linear
;  MOLECULE TYPE: protein
;  ORIGINAL SOURCE:
;  ORGANISM: Enterococcus hirae
;  IMMEDIATE SOURCE:
;  CLONE: Fig.5a (E. hirae)
US-03-737-716-14

Query Match 19.1%; Score 116.5; DB 2; Length 666;
Best Local Similarity 31.0%; Pred. No. 0.0021;
Matches 39; Conservative 19; Mismatches 45; Indels 23; Gaps 5;

```
Qy       8 SGSNNTVRSGSKNVLAGNDNTVISGDNNSVSGSNNTVVSG-------NDNTVT------- 53
            | : ||  : |    :|| ||  ||     :|:  || ||       ||: ::
Db     306 SSTTNTGNNASSGNTSGNTNT--SGSTGQATGAKYTVKSGDSVWKIANDHGISMNQLIEW 363

Qy      54 ---GSNHVVSGTNHIVTDNNNNVSGNDNNVS---GSFHTVSGGHNTVSGSNNTVSGSNHV 107
              :| |  |   :|:  ::: ||: :| |    | :| : | :| ||| ||     |
Db     364 NNIKNNFVYPGQQLVVSKGSSSASGSTSNTSTGNTSSNTANTG-STTSGSTYTVKAGESV 422

Qy     108 VSGSNK 113
           | |||
Db     423 WSVSNK 428
```

RESULT 10
US-09-206-942-35
; Sequence 35, Application US/09206942
; Patent No. 6432669
; GENERAL INFORMATION:
; APPLICANT: Loosmore, Sheena M.
; APPLICANT: Yang, Yan-Ping
; APPLICANT: Klein, Michel H.
; TITLE OF INVENTION: Protective Recombinant Haemophilus Influenzae High
; TITLE OF INVENTION: Molecular Weight Proteins
; FILE REFERENCE: 1038-861 MIS:jb
; CURRENT APPLICATION NUMBER: US/09/206,942
; CURRENT FILING DATE: 1998-12-08
; EARLIER APPLICATION NUMBER: 09/167,568
; EARLIER FILING DATE: 1998-10-07
; NUMBER OF SEQ ID NOS: 95
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 35
; LENGTH: 915
; TYPE: PRT
; ORGANISM: Haemophilus influenzae
US-09-206-942-35

Query Match 18.0%; Score 110; DB 4; Length 915;
Best Local Similarity 28.9%; Pred. No. 0.013;
Matches 37; Conservative 20; Mismatches 53; Indels 18; Gaps 5;

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Qy       2 EQPNTISGSNNTVRSGSKNVLAGNDNTVISGDNNSVSGSNNTVVSG---NDNTVTGSNHV 58
            |   | :|:     :||  | |   :  | |   | ||: |   ||   | : :|| |
Db     398 ENVTTKAGTTINATTGSVEVTAKTGD--IKGGIESNSGNVNITASGDTLNVSNITGQNVT 455

Qy      59 VSGTNHIV----------TDNNNNVSGNDNNVSGSFHTVSGGHNTVSGSNNTVSGSNHVV 108
           |:  :  |          |  | |::     ::|   : ||  | :: | ||:: ||  :
Db     456 VAAASGAVTTTKGSTINATTGNANITTKTGEINGEVKSASGNVN-ITASGNTLNVSN--I 512

Qy     109 SGSNKVVT 116
           :| |  ||
Db     513 TGQNVTVT 520
```

RESULT 11
US-09-206-942-37
; Sequence 37, Application US/09206942
; Patent No. 6432669
; GENERAL INFORMATION:
; APPLICANT: Loosmore, Sheena M.
; APPLICANT: Yang, Yan-Ping
; APPLICANT: Klein, Michel H.
; TITLE OF INVENTION: Protective Recombinant Haemophilus Influenzae High
; TITLE OF INVENTION: Molecular Weight Proteins
; FILE REFERENCE: 1038-861 MIS:jb
; CURRENT APPLICATION NUMBER: US/09/206,942
; CURRENT FILING DATE: 1998-12-08
; EARLIER APPLICATION NUMBER: 09/167,568
; EARLIER FILING DATE: 1998-10-07
; NUMBER OF SEQ ID NOS: 95
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 37
; LENGTH: 1222
; TYPE: PRT
; ORGANISM: Haemophilus influenzae
US-09-206-942-37

Query Match 18.0%; Score 110; DB 4; Length 1222;
Best Local Similarity 28.9%; Pred. No. 0.018;
Matches 37; Conservative 20; Mismatches 53; Indels 18; Gaps 5;

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Qy       2 EQPNTISGSNNTVRSGSKNVLAGNDNTVISGDNNSVSGSNNTVVSG---NDNTVTGSNHV 58
            |   | :|:     :||  | |   :  | |   | ||: |   ||   | : :|| |
Db     705 ENVTTKAGTTINATTGSVEVTAKTGD--IKGGIESNSGNVNITASGDTLNVSNITGQNVT 762

Qy      59 VSGTNHIV----------TDNNNNVSGNDNNVSGSFHTVSGGHNTVSGSNNTVSGSNHVV 108
           |:  :  |          |  | |::     ::|   : ||  | :: | ||:: ||  :
Db     763 VAAASGAVTTTKGSTINATTGNANITTKTGEINGEVKSASGNVN-ITASGNTLNVSN--I 819

Qy     109 SGSNKVVT 116
           :| |  ||
Db     820 TGQNVTVT 827
```

RESULT 12
US-09-206-942-34
; Sequence 34, Application US/09206942
; Patent No. 6432669
; GENERAL INFORMATION:
; APPLICANT: Loosmore, Sheena M.
; APPLICANT: Yang, Yan-Ping
; APPLICANT: Klein, Michel H.
; TITLE OF INVENTION: Protective Recombinant Haemophilus Influenzae High
; TITLE OF INVENTION: Molecular Weight Proteins
; FILE REFERENCE: 1038-861 MIS:jb
; CURRENT APPLICATION NUMBER: US/09/206,942
; CURRENT FILING DATE: 1998-12-08
; EARLIER APPLICATION NUMBER: 09/167,568
; EARLIER FILING DATE: 1998-10-07
; NUMBER OF SEQ ID NOS: 95
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 34
; LENGTH: 1228

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;   TYPE: PRT
;   ORGANISM: Haemophilus influenzae
US-09-206-942-34

  Query Match             18.0%;  Score 110;  DB 4;  Length 1228;
  Best Local Similarity   28.9%;  Pred. No. 0.019;
  Matches   37;  Conservative   20;  Mismatches   53;  Indels   18;  Gaps    5;

Qy       2 EQPNTISGSNNTVRSGSKNVLAGNDNTVISGDNNSVSGSNNTVVSG---NDNTVTGSNHV 58
           |   | :|:     :||  | |   :  | |   | ||: |   ||   | : :|| |
Db     711 ENVTTKAGTTINATTGSVEVTAKTGD--IKGGIESNSGNVNITASGDTLNVSNITGQNVT 768

Qy      59 VSGTNHIV----------TDNNNNVSGNDNNVSGSFHTVSGGHNTVSGSNNTVSGSNHVV 108
           |:  :  |          |  | |::     ::|   : ||  | :: | ||:: ||  :
Db     769 VAAASGAVTTTKGSTINATTGNANITTKTGEINGEVKSASGNVN-ITASGNTLNVSN--I 825

Qy     109 SGSNKVVT 116
           :| |  ||
Db     826 TGQNVTVT 833


RESULT 13
US-08-728-470-9
; Sequence 9, Application US/08728470
; Patent No. 5928651
;  GENERAL INFORMATION:
;    APPLICANT:  Barenkamp, Stephen J
;    TITLE OF INVENTION:  High Molecular Weight Surface Proteins
;    TITLE OF INVENTION:  of No. 5928651-Typeable Haemophilus
;    NUMBER OF SEQUENCES:  10
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Shoemaker and Mattare, Ltd.
;      STREET:  2001 Jefferson Davis Hwy., 1203 Crystal Plaza
;      STREET:  Bldg. 1
;      CITY:  Arlington
;      STATE:  Virginia
;      COUNTRY:  U.S.A.
;      ZIP:  22202-0286
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/728,470
;      FILING DATE:
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/302,832
;      FILING DATE:  16-MAR-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US PCT/US93/02166
;      FILING DATE:  16-MAR-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  GB 9205704.1
;      FILING DATE:  16-MAR-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Berkstresser, Jerry W
;      REGISTRATION NUMBER:  22,651
;      REFERENCE/DOCKET NUMBER:  1038-633
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (703) 415-0810
;      TELEFAX:  (703) 415-0813
;  INFORMATION FOR SEQ ID NO:  9:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1338 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-728-470-9

  Query Match             17.9%;  Score 109;  DB 2;  Length 1338;
  Best Local Similarity   26.8%;  Pred. No. 0.026;
  Matches   30;  Conservative   24;  Mismatches   46;  Indels   12;  Gaps    5;

Qy       8 SGSNNTVRSGSKNVLAGNDNTVISGDNNSVSG---SNNTVVSGNDNTVTGSNHVVSGTNH 64
           :  | | : |:  : |   :  ::  | :: |   | |  |:  :| ||  | |:: |:
Db     881 AAGNVTTKEGT-TINATTGSVEVTAQNGTIKGNITSQNVTVTATENLVTTENAVINATSG 939

Qy      65 IVTDNNNNVSGNDNNVSGSFHTVSGGHNTVSGSNNTVSGSNHVVSGSNKVVT 116
           |     |:|    :: |   : ||  | :: | ||:  ||  ::| :  ||
Db     940 TV-----NISTKTGDIKGGIESTSGNVN-ITASGNTLKVSN--ITGQDVTVT 983


RESULT 14
US-08-719-641-9
; Sequence 9, Application US/08719641
; Patent No. 6218141
;  GENERAL INFORMATION:
;    APPLICANT:  Barenkamp, Stephen J
;    TITLE OF INVENTION:  High Molecular Weight Surface Proteins
;    TITLE OF INVENTION:  of No. 6218141-Typeable Haemophilus
;    NUMBER OF SEQUENCES:  10
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Shoemaker and Mattare, Ltd.
;      STREET:  2001 Jefferson Davis Hwy., 1203 Crystal Plaza
;      STREET:  Bldg. 1
;      CITY:  Arlington
;      STATE:  Virginia
;      COUNTRY:  U.S.A.
;      ZIP:  22202-0286
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/719,641
;      FILING DATE:
;      CLASSIFICATION:  530
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/302,832
;      FILING DATE:  16-SEP-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US PCT/US93/02166
;      FILING DATE:  16-MAR-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  GB 9205704.1
;      FILING DATE:  16-MAR-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Berkstresser, Jerry W
;      REGISTRATION NUMBER:  22,651
;      REFERENCE/DOCKET NUMBER:  1038-625
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (703) 415-0810
;      TELEFAX:  (703) 415-0813
;  INFORMATION FOR SEQ ID NO:  9:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1338 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-719-641-9

  Query Match             17.9%;  Score 109;  DB 4;  Length 1338;
  Best Local Similarity   26.8%;  Pred. No. 0.026;
  Matches   30;  Conservative   24;  Mismatches   46;  Indels   12;  Gaps    5;

Qy       8 SGSNNTVRSGSKNVLAGNDNTVISGDNNSVSG---SNNTVVSGNDNTVTGSNHVVSGTNH 64
           :  | | : |:  : |   :  ::  | :: |   | |  |:  :| ||  | |:: |:
Db     881 AAGNVTTKEGT-TINATTGSVEVTAQNGTIKGNITSQNVTVTATENLVTTENAVINATSG 939

Qy      65 IVTDNNNNVSGNDNNVSGSFHTVSGGHNTVSGSNNTVSGSNHVVSGSNKVVT 116
           |     |:|    :: |   : ||  | :: | ||:  ||  ::| :  ||
Db     940 TV-----NISTKTGDIKGGIESTSGNVN-ITASGNTLKVSN--ITGQDVTVT 983
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RESULT 15
US-08-728-470-10
; Sequence 10, Application US/08728470
; Patent No. 5928651
;  GENERAL INFORMATION:
;    APPLICANT:  Barenkamp, Stephen J
;    TITLE OF INVENTION:  High Molecular Weight Surface Proteins
;    TITLE OF INVENTION:  of No. 5928651-Typeable Haemophilus
;    NUMBER OF SEQUENCES:  10
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Shoemaker and Mattare, Ltd.
;      STREET:  2001 Jefferson Davis Hwy., 1203 Crystal Plaza
;      STREET:  Bldg. 1
;      CITY:  Arlington
;      STATE:  Virginia
;      COUNTRY:  U.S.A.
;      ZIP:  22202-0286
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/728,470
;      FILING DATE:
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/302,832
;      FILING DATE:  16-MAR-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US PCT/US93/02166
;      FILING DATE:  16-MAR-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  GB 9205704.1
;      FILING DATE:  16-MAR-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Berkstresser, Jerry W
;      REGISTRATION NUMBER:  22,651
;      REFERENCE/DOCKET NUMBER:  1038-633
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (703) 415-0810
;      TELEFAX:  (703) 415-0813
;  INFORMATION FOR SEQ ID NO:  10:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1529 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-728-470-10

  Query Match          17.9%;  Score 109;  DB 2;  Length 1529;
  Best Local Similarity   26.8%;  Pred. No. 0.03;
  Matches   30;  Conservative   24;  Mismatches   46;  Indels   12;  Gaps    5;

Qy       8 SGSNNTVRSGSKNVLAGNDNTVISGDNNSVSG---SNNTVVSGNDNTVTGSNHVVSGTNH 64
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Db    1072 AAGNVTTKEGT-TINATTGSVEVTAQNGTIKGNITSQNVTVTATENLVTTENAVINATSG 1130

Qy      65 IVTDNNNNVSGNDNNVSGSFHTVSGGHNTVSGSNNTVSGSNHVVSGSNKVVT 116
             |     |:|    :: |   : ||  | :: | ||:  ||  ::| :  ||
Db    1131 TV-----NISTKTGDIKGGIESTSGNVN-ITASGNTLKVSN--ITGQDVTVT 1174


Search completed: March 13, 2003, 18:05:04
Job time : 17 secs
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